

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) In a round baler for movement across the ground and formation of cylindrical bales of crop material, the baler having a ~~frame with a front end and an opposing rear end~~, a wheel assembly including a transverse axle ~~part of and supporting the frame~~, a clam shell-like bale-forming chamber supported on the frame axle and including a forward portion and a tailgate vertically pivotable between a closed position for forming round bales and an open position for bale ejection, a bale kicker generally vertically pivotably connected to the frame axle for contacting a bale during its ejection from the bale-forming chamber and for propelling it rearwardly of the baler, the improvement comprising:

the bale kicker including:

a generally flat table-like ramp affixed to the axle for generally free vertical pivotal movement between a closed position where it is approximately horizontal or slightly above horizontal, and an open position where it is below horizontal, generally in contact with the ground; and

a first generally transverse torsion bar with a longitudinal axis generally parallel to the transverse axle and having a first end affixed to the axle, and an opposing second end affixed to the ramp, such that movement of the table ramp between the closed position and the open position imparts a twist to the torsion bar that provides a kick to the ejected bale as it moves off the ramp onto the ground, that kick being the primary impetus for bale ejection.

2. (Currently Amended) The improvement of claim 1, wherein:
the torsion bar has a multifaceted portion on each of the first and second ends;

a pair of spaced-apart axle brackets are rigidly affixed to the axle and extend generally rearwardly away therefrom and are pivotably connected to the ramp such that the ramp may pivot vertically about the axle brackets;

a support arm ~~an axle bracket~~ is rigidly affixed to the axle and extends generally rearwardly away therefrom generally between and parallel to the pair of axle brackets; and

the support arm ~~axle bracket~~ has a hole therethrough matching the multifaceted shape of the first end of the torsion bar, and the first end of the torsion bar extends through the hole in the axle bracket, whereby pivotal movement of the ramp from the closed position toward the open position imparts a twist to the torsion bar.

3. (Currently Amended) The improvement of Claim 2, wherein:

the second end of the torsion bar is affixed to the ramp by an elongate a coupler that has a first end and an opposing second end;

the coupler has a hole therethrough adjacent the first end of the coupler matching the multifaceted shape on the second end of the torsion bar and the second end of the torsion bar extends through the ~~hole~~ hole in the coupler; and

the second end of the coupler connected to the ramp to allow the table to pivot between the closed position and the open position and impart a twist to the torsion bar.

4. (Currently Amended) The improvement of claim 3, wherein:

the ramp is generally rectangularly-shaped with a pair of U-shaped with the parallel arms extending away therefrom and thereof pivotally affixed to the axle.

5. (Currently Amended) The improvement of claim 4, wherein:
the torsion bar is generally located between the parallel arms of the U-shaped ramp.
6. The improvement of claim 3, wherein:
the kicker includes a second torsion bar, and the first and second torsion bars are axially aligned.
7. (Currently Amended) In a round baler for movement across the ground and formation of cylindrical bales of crop material, the baler having a ~~frame with a front end and an opposing rear end, a~~ wheel assembly including a transverse axle ~~part of and supporting the frame,~~ a clam shell-like bale-forming chamber supported on the frame axle and including a forward portion and a tailgate vertically pivotable between a closed position for forming round bales and an open position for bale ejection, a bale kicker generally vertically pivotably connected to the frame axle for contacting a bale during its ejection from the bale-forming chamber and for propelling it rearwardly of the baler, the improvement comprising:
the bale kicker including:
a generally flat table-like ramp affixed to the axle for generally free vertical pivotal movement between a closed position where it is approximately horizontal or slightly above horizontal, and an open position where it is below horizontal, generally in contact with the ground; and
first and second generally transverse torsion bars with aligned longitudinal axes generally parallel to the transverse axle, each having a first end affixed to the axle, and an opposing second end affixed to the ramp, such that movement of the table ramp between the closed position and the open position imparts a twist to the torsion bars that provides a kick to the ejected bale as it moves off the ramp onto the ground, that kick being the primary impetus for bale ejection.

8. (Currently Amended) The improvement of claim 7, wherein:
each of the second ends of the torsion bars is affixed to the ramp by
respective ~~elongate couplers~~ support plates that have first ends and opposing
second ends;
the each respective support plate ~~coupler~~ has a hole therethrough
adjacent the first end of the ~~coupler~~ support plate matching the multifaceted
shape on the second ends of the torsion bars and the second ends of the torsion
bars extends through the ~~hole~~ hole in the ~~coupler~~ respective support plate; and
the second ends of the ~~couplers~~ support plates are connected to the
ramp to allow the ~~table~~ ramp to pivot between the closed position and the open
position and impart a twist to the torsion bar.
9. (Currently Amended) The improvement of claim 8, wherein:
the ramp is generally rectangular U-shaped ~~with the parallel arms thereof~~
with a pair of generally parallel arms extending away therefrom and pivotally
affixed to the axle.
10. (Currently Amended) The improvement of claim 9, wherein:
the first and second torsion bars are generally located between the
parallel arms of the U-shaped ramp.
11. (Currently Amended) A round baler for movement across the ground and
formation of cylindrical bales of crop material, the baler comprising:
a ~~frame with a front end and an opposing rear end;~~
a wheel assembly including a transverse axle ~~part of and supporting the~~
~~frame;~~
a bale-forming chamber supported on the ~~frame~~ axle and including a
forward portion and a tailgate vertically pivotable between a closed position for
forming round bales and an open position for bale ejection;

a bale kicker generally vertically pivotably connected to the frame axle for contacting a bale during its ejection from the bale-forming chamber and for propelling it rearwardly of the baler, the bale kicker comprising:

a generally flat table-like ramp affixed to the axle for generally free vertical pivotal movement between a closed position where it is approximately horizontal or slightly above horizontal, and an open position where it is below horizontal, generally in contact with the ground; and

a first generally transverse torsion bar with a longitudinal axis generally parallel to the transverse axle and having a first end affixed to the axle, and an opposing second end affixed to the ramp, such that movement of the table ramp between the closed position and the open position imparts a twist to the torsion bar that provides a kick to the ejected bale as it moves off the ramp onto the ground, that kick being the primary impetus for bale ejection.

12. (Currently Amended) The round baler of claim 11, wherein:
the torsion bar has a multifaceted portion on each of the first and second ends:

an axle bracket is rigidly affixed to the axle and extends generally rearwardly away therefrom; and

the axle bracket has a hole therethrough matching the multifaceted shape of the first end of the torsion bar, and the first end of the torsion bar extends through the hole in the axle bracket, whereby pivotal movement of the ramp from the closed position toward the open position imparts a twist to the torsion bar.

13. (Currently Amended) The round baler of claim 12, wherein:

the second end of the torsion bar is affixed to the ramp by an elongate a coupler that has a first end and an opposing second end;

the coupler has a hole therethrough adjacent the first end of the coupler matching the multifaceted shape on the second end of the torsion bar and the second end of the torsion bar extends through the held hole in the coupler; and

the second end of the coupler connected to the ramp to allow the table to pivot between the closed position and the open position and impart a twist to the torsion bar.

14. The round baler of claim 13, wherein:

the kicker includes a second torsion bar, and the first and second torsion bars are axially aligned.

15. (Currently Amended) A round baler for movement across the ground and formation of cylindrical bales of crop material comprising:

~~a frame with a front end and an opposing rear end;~~

~~a wheel assembly including a transverse axle part of and supporting the frame;~~

a bale-forming chamber supported on the frame axle and including a forward portion and a tailgate vertically pivotable between a closed position for forming round bales and an open position for bale ejection;

a bale kicker generally vertically pivotably connected to the frame axle for contacting a bale during its ejection from the bale-forming chamber and for propelling it rearwardly of the baler, the kicker comprising:

a generally flat table-like ramp affixed to the axle for generally free vertical pivotal movement between a closed position where it is approximately horizontal or slightly above horizontal, and an open position where it is below horizontal, generally in contact with the ground; and

first and second generally transverse torsion bars with aligned longitudinal axes generally parallel to the transverse axle, each having a first end affixed to the axle, and an opposing second end affixed to the ramp, such that movement of the table ramp between the closed position and the open position imparts a twist to the torsion bars that provides a kick to the ejected bale as it moves off the ramp onto the ground, that kick being the primary impetus for bale ejection.

16. (Currently Amended) The round baler of claim 15, wherein:
each of the second ends of the torsion bars is affixed to the ramp by
respective elongate couplers that have first ends and opposing second ends;
the coupler has a hole therethrough adjacent the first end of the coupler
matching the multifaceted shape on the second ends of the torsion bars and the
second ends of the torsion bars extends through the ~~held~~ hole in the coupler; and
the second ends of the couplers are connected to the ramp to allow the
~~table~~ ramp to pivot between the closed position and the open position and impart
a twist to the torsion bar.
17. (Currently Amended) The round baler of claim 16, wherein:
the ramp is generally rectangularly shaped ~~U-shaped with the~~ with a pair
of parallel arms extending away therefrom and thereof pivotally affixed to the
axle.
18. (Currently Amended) The round baler of claim 17, wherein:
the first and second torsion bars are generally located between the
parallel arms of the ~~U-shaped~~ ramp.